CLAIMS

- An enclosure for carrying out an operation under sterile conditions having a first apparatus disposed within the enclosure for generating and delivering a sterilant 5 vapour from a supply held within the enclosure to condense on surfaces throughout the enclosure to sterilise the surfaces, and means to draw gas from the enclosure at a location remote from the apparatus for delivering the sterilant to the enclosure to ensure that the sterilant 10 vapour reaches the most remote part of the enclosure from the location where the sterilant is delivered to the enclosure and to maintain the enclosure at a predetermined pressure below atmospheric so that any leak paths result in 15 leakage from the atmosphere into the enclosure and do not release sterilant vapour to atmosphere around the enclosure.
- An enclosure as claimed in claim 1, wherein the means for drawing gas from the enclosure comprise a fan located in a conduit connected to an outlet from the enclosure, the conduit having means to render sterilant reaching the conduit ineffective to avoid release of sterilant to atmosphere.
- 25 3. An enclosure as claimed in claim 2, wherein the means to render the sterilant ineffective are located upstream of the fan in relation to the enclosure.
- 4. An apparatus as claimed in claim 3, wherein the means to render the sterilant ineffective comprise a catalytic converter for breaking the sterilant down into harmless biproducts which can be exhausted to atmosphere.

WO 2005/061010 PCT/GB2004/005313 - 17 -

5. An enclosure as claimed in claim 3 or claim 4, wherein the conduit has selectively operable valve controlled outlets of larger and smaller capacities, the smaller capacity outlet being open during said period when the enclosure is to be maintained at a predetermined reduced pressure and the larger valve controlled outlet being opened during discharge of the sterilant atmosphere from the enclosure.

10

15

20

5

- 6. An enclosure as claimed in any of the preceding claims wherein the enclosure has a main chamber containing said apparatus for producing sterilant vapour and within which the operation to be carried out in the chamber is performed and a plenum chamber separated from the main chamber by a filter, the plenum chamber having a pump for delivering air into the plenum chamber through the filter to the main chamber to create a filter flow of air through the chamber and the means for drawing gas from the chamber remote from the first apparatus is connected to the plenum chamber.
- 7. An enclosure as claimed in claim 6, wherein a filter is provided in the outlet from the plenum chamber to the means for drawing gas from the plenum chamber.

25

8. An enclosure as claimed in any of the preceding claims, wherein the enclosure contains a second apparatus for rendering sterilant in the atmosphere in the chamber ineffective after the sterilisation of the chamber.

30

9. An enclosure as claimed in claim 8, wherein the means for rendering sterilant ineffective comprises a housing

WO 2005/061010 PCT/GB2004/005313
- 18 -

containing a catalytic converter for converting the sterilant into harmless biproducts for disposal and means for circulating the atmosphere of the chamber through the housing to reduce the sterilant concentration in the atmosphere when the sterilisation operation has been performed.

5